

Safety Data Sheet

LOCTITE SI 5910 FLANGE SEALANT BK known as 5910 Black silicone 300ml

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SDS No.: 152856

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Section 1. Identification of the substance/preparation and of the company/undertaking

Product name:

LOCTITE SI 5910 FLANGE SEALANT BK known as 5910 Black silicone 300ml

Other means of identification:

LOCTITE SI 5910 CR300MLLOCTITE SI 5910 CR300ML

Product code:

IDH652996

Recommended use of the chemical and restrictions on use

Intended use:

Sealant

Identification of manufacturer, importer or distributor

Manufacturer: Henkel Loctite (China) Co. Ltd, No. 90 Zhu Jiang Road, Yantai Economic, Technological Development Zone, 264006 Shangdong Province, China Tel: +86-535-6399803 Fax: +86-535-6371999

Importer: Henkel Thailand Ltd The Offices at Centralworld, 35th Floor, 999/9 Rama 1 Rd, Kwang Patumwan, Khet Patumwan, Bangkok 10330, Thailand. Phone: +6622098000 Fax: +6622098008

E-mail address of person responsible for Safety Data Sheet:

ap-ua-psra.sea@henkel.com

Emergency information:

FOR EMERGENCIES ONLY (Spill, major leak, Fire, Exposure, or Accident). Call CHEMTREC: +1 703-741-5970

Section 2. Hazards identification

GHS Classification:

Hazard Class Hazard Category Target organ

Serious eye damage/eye irritation Category 1 Skin sensitizer Category 1 Category 1B Carcinogenicity

Category 2 Specific target organ toxicity -Upper respiratory tract single exposure

Chronic hazards to the aquatic

Category 3

environment

GHS label elements:

Hazard pictogram:

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Signal word:

Danger

Hazard statement:

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H350 May cause cancer.

H371 May cause damage to the following organs:

H412 Harmful to aquatic life with long lasting effects.

Precaution:

Prevention:

P201 Obtain special instructions before use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P311 If exposed or concerned: Call a POISON CENTER/doctor.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

Disposal:

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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Section 3. Composition / information on ingredients

Substance or Mixture:

Mixture

Declaration of hazardous chemical:

Hazard component CAS-No.	Content	GHS Classification
Calcium carbonate	30- 60 %	
471-34-1		
Butan-2-one O,O',O"-(vinylsilylidyne)trioxime 2224-33-1	1- 10 %	Acute toxicity 5; Oral H303 Serious eye damage/eye irritation 1 H318 Skin sensitizer 1 H317 Specific target organ toxicity - repeated exposure 2 H373 Acute hazards to the aquatic environment 3
		H402
2-butanone oxime 96-29-7	1- 10 %	Flammable liquids 4 H227 Acute toxicity 3; Oral H301 Acute toxicity 4; Dermal H312 Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 1 H318 Skin sensitizer 1 H317 Carcinogenicity 1B; Inhalation H350 Specific target organ toxicity - single exposure 1 H370 Specific target organ toxicity - single exposure 3 H336 Specific target organ toxicity - repeated exposure 2 H373 Acute hazards to the aquatic environment 3 H402
Carbon black - Nano	1- 10 %	
1333-86-4	0.1.0	
octamethylcyclotetrasiloxane 556-67-2	< 0.1 %	Flammable liquids 3 H226 Toxic to reproduction 2 H361 Chronic hazards to the aquatic environment 1 H410

Section 4. First aid measures

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

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Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

Indication of immediate medical attention and special treatment needed:

See section: Description of first aid measures

Section 5. Fire fighting measures

Suitable extinguishing media:

Carbon dioxide, foam, powder

Specific hazards arising from the chemical:

Do not expose to direct heat.

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

Special protection equipment and precautions for firefighters:

Wear self-contained breathing apparatus.

Additional fire fighting advice:

In case of fire, keep containers cool with water spray.

Section 6. Accidental release measures

Personal precautions:

Avoid skin and eye contact.

Wear protective equipment.

Ensure adequate ventilation.

See advice in section 8

Environmental precautions:

Do not empty into drains / surface water / ground water.

Clean-up methods:

Scrape up as much material as possible.

Store in a partly filled, closed container until disposal.

Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and storage

Handling:

Use only in well-ventilated areas.

Vapours should be extracted to avoid inhalation.

Avoid skin and eye contact.

See advice in section 8

Storage:

Store in a cool, well-ventilated place.

Refer to Technical Data Sheet

Never allow product to get in contact with water during storage

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Section 8. Exposure controls / personal protection

Components with specific control parameters for workplace:

CALCIUM CARBONATE, INHALABLE DUST 471-34-1	Value type	Time Weighted Average (TWA):
	mg/m ³	15
	Remarks	TH OEL
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles 471-34-1	Value type	Time Weighted Average (TWA):
	mg/m ³	3
	Remarks	ACGIH
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles 471-34-1	Value type	Time Weighted Average (TWA):
	mg/m ³	10
	Remarks	ACGIH
CALCIUM CARBONATE, RESPIRABLE DUST 471-34-1	Value type	Time Weighted Average (TWA):
	mg/m ³	5
	Remarks	TH OEL
CARBON BLACK, INHALABLE FRACTION 1333-86-4	Value type	Time Weighted Average (TWA):
	mg/m ³	3
	Remarks	ACGIH

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Wear protective glasses.

Protective eye equipment should conform to EN166.

Body protection:

Suitable protective clothing

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

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Engineering controls:

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

Hygienic measures:

Take off contaminated clothing and wash before reuse.

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Section 9. Physical and chemical properties

Appearance: black paste

Odor: mild

Odor threshold (CA):

pH:

Not applicable

Melting point / freezing point:

Not available.

Specific gravity: 1.34

Boiling point: > 200 °C (> 392 °F)
Flash point: > 93.30 °C (> 199.94 °F)
Evaporation rate: No data available.
Flammability (solid, gas): No data available.
Lower explosive limit: No data available.
Upper explosive limit: No data available.
Vapor pressure: < 5 mm hg

(; 20 °C (68 °F))

Vapor density: Heavier than air Density: 1.31 g/cm3

Solubility: Polymerises in presence of water.

Partition coefficient: n- No data available.

octanol/water:

Auto ignition:No data available.Decomposition temperature:No data available.Viscosity:No data available.

VOC content: < 5.00 %

(2010/75/EC)

Section 10. Stability and reactivity

Reactivity/Incompatible materials:

Polymerises in presence of water.

Chemical stability:

Stable under recommended storage conditions.

Conditions to avoid:

Stable

Exposure to air or moisture over prolonged periods.

Hazardous decomposition products:

Methyl ethyl ketoxime formed during cure.

Methanol is liberated slowly upon exposure to moisture.

Section 11. Toxicological information

General toxicological Methylethyl ketoxime released during polymerisation of oxime curing RTV silicones is

information: irritating to the respiratory system

Methylethyl ketoxime released during polymerisation of oxime curing silicones. It is harmful

in contact with skin and is a skin sensitizer.

Prolonged or repeated contact may cause skin irritation.

Oral toxicity: Acute toxicity estimate (ATE): > 2,000 mg/kg

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Method: Calculation method

Dermal toxicity: Acute toxicity estimate (ATE) : > 2,000 mg/kg

Method: Calculation method

Symptoms of Overexposure: SKIN: Rash, Urticaria.

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

Acute oral toxicity:

Calcium carbonate	Value type	LD50
471-34-1	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 420 (Acute Oral Toxicity)
Butan-2-one O,O',O"-	Value type	LD50
(vinylsilylidyne)trioxime	Value	> 2,000 mg/kg
2224-33-1	Species	rat
	Method	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down
		Procedure)
Butan-2-one O,O',O"-	Value type	Acute toxicity estimate (ATE)
(vinylsilylidyne)trioxime	Value	2,500 mg/kg
2224-33-1	Species	
	Method	Expert judgement
2-butanone oxime	Value type	Acute toxicity estimate (ATE)
96-29-7	Value	100 mg/kg
	Species	
	Method	Expert judgement
Carbon black - Nano	Value type	LD50
1333-86-4	Value	> 8,000 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)
octamethylcyclotetrasiloxane	Value type	LD50
556-67-2	Value	> 4,800 mg/kg
	Species	rat

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Acute inhalative toxicity:

Calcium carbonate	Value type	LC50
471-34-1	Value	> 3 mg/l
	Exposure time	4 h
	Species	rat
	Method	OECD Guideline 403 (Acute Inhalation Toxicity)
octamethylcyclotetrasiloxane	Value type	LC50
octamethylcyclotetrasiloxane 556-67-2	Value type Value	LC50 36 mg/l
2 2		
2 2	Value	36 mg/l

Acute dermal toxicity:

Calcium carbonate	Value type	LD50
471-34-1	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
Butan-2-one O,O',O"-	Value type	LD50
(vinylsilylidyne)trioxime	Value	> 2,009 mg/kg
2224-33-1	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
2-butanone oxime	Value type	Acute toxicity estimate (ATE)
96-29-7	Value	1,100 mg/kg
	Species	
	Method	Expert judgement
octamethylcyclotetrasiloxane	Value type	LD50
556-67-2	Value	> 2,375 mg/kg
	Species	rat
	Method	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Calcium carbonate	Result	not irritating
471-34-1	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Butan-2-one O,O',O"-	Result	not irritating
(vinylsilylidyne)trioxime	Exposure time	4 h
2224-33-1	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Carbon black - Nano	Result	not irritating
1333-86-4	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
octamethylcyclotetrasiloxane	Result	not irritating
556-67-2	Exposure time	
	Species	rabbit
	Method	equivalent or similar to OECD Guideline 404 (Acute Dermal
		Irritation / Corrosion)

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Serious eye damage/irritation:

Calcium carbonate	Result	not irritating
471-34-1	Exposure time	*
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
2-butanone oxime	Result	Category 1 (irreversible effects on the eye)
96-29-7	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Carbon black - Nano	Result	not irritating
1333-86-4	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
octamethylcyclotetrasiloxane	Result	not irritating
556-67-2	Exposure time	
	Species	rabbit
	Method	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Calcium carbonate	Result	not sensitising
471-34-1	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Butan-2-one O,O',O"-	Result	Sensitizing
(vinylsilylidyne)trioxime	Test type	Guinea pig maximisation test
2224-33-1	Species	guinea pig
	Method	OECD Guideline 406 (Skin Sensitisation)
2-butanone oxime	Result	sensitising
96-29-7	Test type	Guinea pig maximisation test
	Species	guinea pig
	Method	OECD Guideline 406 (Skin Sensitisation)
Carbon black - Nano	Result	not sensitising
1333-86-4	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
octamethylcyclotetrasiloxane	Result	not sensitising
556-67-2	Test type	Guinea pig maximisation test
	Species	guinea pig
	Method	OECD Guideline 406 (Skin Sensitisation)

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Germ cell mutagenicity:

Calcium carbonate	Result	negative
471-34-1	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
4/1-34-1	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Calcium carbonate	Result	negative
471-34-1	Type of study / Route of administration	in vitro mammalian chromosome aberration test
7/1 54 1	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 473 (In vitro Mammalian Chromosome
	Method	Aberration Test)
Calcium carbonate	Result	negative
471-34-1	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene
		Mutation Test)
Butan-2-one O,O',O"-	Result	negative
(vinylsilylidyne)trioxime	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
2224-33-1	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butan-2-one O,O',O"-	Result	negative
(vinylsilylidyne)trioxime	Type of study / Route of administration	intraperitoneal
2224-33-1	Metabolic activation / Exposure time	
	Species	mouse
	Method	OECD Guideline 474 (Mammalian Erythrocyte
		Micronucleus Test)
2-butanone oxime	Result	negative
96-29-7	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	EPA OPPTS 870.5265 (The Salmonella typhimurium
		Bacterial Reverse Mutation Test)
2-butanone oxime	Result	negative
96-29-7	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene
		Mutation Test)
2-butanone oxime	Result	negative
96-29-7	Type of study / Route of administration	DNA damage and repair assay, unscheduled DNA
		synthesis in mammalian cells in vitro
	Metabolic activation / Exposure time	
	Method	OECD Guideline 482 (Genetic Toxicology: DNA Damage
		and Repair, Unscheduled DNA Synthesis in Mammalian
21.4	D 1	Cells In Vitro)
2-butanone oxime 96-29-7	Result Type of study / Route of administration	negative
90-29-7	Metabolic activation / Exposure time	oral: gavage
	Species Species	rat
	Method	rat EPA OPPTS 870.5385 (In Vivo Mammalian Cytogenetic
	Method	Tests: Bone Marrow Chromosomal Analysis)
2-butanone oxime	Result	negative
96-29-7	Type of study / Route of administration	oral: feed
70 27 7	Metabolic activation / Exposure time	Oran recu
	Species	Drosophila melanogaster
	Method	EPA OPPTS 870.5385 (In Vivo Mammalian Cytogenetic
	Homod	Tests: Bone Marrow Chromosomal Analysis)
Carbon black - Nano	D14	negative
	i Kesuit	
1333-86-4	Result Type of study / Route of administration	
1333-86-4	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
1333-86-4	Type of study / Route of administration Metabolic activation / Exposure time	bacterial reverse mutation assay (e.g Ames test) with and without
1333-86-4 Carbon black - Nano	Type of study / Route of administration Metabolic activation / Exposure time Method	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	Type of study / Route of administration Metabolic activation / Exposure time Method Result	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay) negative
Carbon black - Nano	Type of study / Route of administration Metabolic activation / Exposure time Method Result Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay) negative mammalian cell gene mutation assay
Carbon black - Nano	Type of study / Route of administration Metabolic activation / Exposure time Method Result	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay) negative mammalian cell gene mutation assay with and without
Carbon black - Nano	Type of study / Route of administration Metabolic activation / Exposure time Method Result Type of study / Route of administration Metabolic activation / Exposure time	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay) negative mammalian cell gene mutation assay
Carbon black - Nano	Type of study / Route of administration Metabolic activation / Exposure time Method Result Type of study / Route of administration Metabolic activation / Exposure time	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay) negative mammalian cell gene mutation assay with and without OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Carbon black - Nano 1333-86-4	Type of study / Route of administration Metabolic activation / Exposure time Method Result Type of study / Route of administration Metabolic activation / Exposure time Method Result	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay) negative mammalian cell gene mutation assay with and without OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) negative
Carbon black - Nano 1333-86-4 Carbon black - Nano	Type of study / Route of administration Metabolic activation / Exposure time Method Result Type of study / Route of administration Metabolic activation / Exposure time Method Result Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay) negative mammalian cell gene mutation assay with and without OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) negative sister chromatid exchange assay in mammalian cells
Carbon black - Nano 1333-86-4 Carbon black - Nano	Type of study / Route of administration Metabolic activation / Exposure time Method Result Type of study / Route of administration Metabolic activation / Exposure time Method Result	bacterial reverse mutation assay (e.g Ames test) with and without OECD Guideline 471 (Bacterial Reverse Mutation Assay) negative mammalian cell gene mutation assay with and without OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) negative

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Carbon black - Nano	Result	negative	
1333-86-4	Type of study / Route of administration	in vitro mammalian cell micronucleus test	
	Metabolic activation / Exposure time	with and without	
	Method	OECD Guideline 487 (In vitro Mammalian Cell	
	I memor	Micronucleus Test)	
Carbon black - Nano	Result	negative	
1333-86-4	Type of study / Route of administration	mammalian cell gene mutation assay	
	Metabolic activation / Exposure time	with and without	
	Method	OECD Guideline 490 (In Vitro Mammalian Cell Gene	
		Mutation Tests Using the Thymidine Kinase Gene)	
Carbon black - Nano	Result	negative	
1333-86-4	Type of study / Route of administration	inhalation	
	Metabolic activation / Exposure time		
	Species	rat	
	Method	OECD Guideline 489 (In Vivo Mammalian Alkaline	
		Comet Assay)	
octamethylcyclotetrasiloxane	Result	negative	
556-67-2	Type of study / Route of administration	bacterial gene mutation assay	
	Metabolic activation / Exposure time	with and without	
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)	
octamethylcyclotetrasiloxane	Result	negative	
556-67-2	Type of study / Route of administration	in vitro mammalian chromosome aberration test	
	Metabolic activation / Exposure time	with and without	
	Method	equivalent or similar to OECD Guideline 473 (In vitro	
		Mammalian Chromosome Aberration Test)	
octamethylcyclotetrasiloxane	Result	negative	
556-67-2	Type of study / Route of administration	mammalian cell gene mutation assay	
	Metabolic activation / Exposure time	with and without	
	Method	equivalent or similar to OECD Guideline 476 (In vitro	
		Mammalian Cell Gene Mutation Test)	
octamethylcyclotetrasiloxane	Result	negative	
556-67-2	Type of study / Route of administration	inhalation	
	Metabolic activation / Exposure time		
	Species	rat	
	Method	equivalent or similar to OECD Guideline 475	
		(Mammalian Bone Marrow Chromosome Aberration Test)	
octamethylcyclotetrasiloxane	Result	negative	
556-67-2	Type of study / Route of administration	oral: gavage	
	Metabolic activation / Exposure time		
	Species	rat	
	Method	equivalent or similar to OECD Guideline 478 (Genetic	
		Toxicology: Rodent Dominant Lethal Test)	

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Repeated dose toxicity:

Calcium carbonate	Result	NOAEL=1,000 mg/kg
471-34-1	Route of application	oral: gavage
	Exposure time / Frequency of treatment	48 ddaily
	Species	rat
	Method	OECD Guideline 422 (Combined Repeated Dose Toxicity
		Study with the Reproduction / Developmental Toxicity
		Screening Test)
Butan-2-one O,O',O"-	Result	LOAEL=40 mg/kg
(vinylsilylidyne)trioxime	Route of application	oral: gavage
2224-33-1	Exposure time / Frequency of treatment	13 w5 d/week
	Species	rat
	Method	EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
2-butanone oxime	Result	LOAEL=40 mg/kg
96-29-7	Route of application	oral: gavage
	Exposure time / Frequency of treatment	13 w5 d/week
	Species	rat
	Method	EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
Carbon black - Nano	Result	NOAEL=> 1,000 mg/kg
1333-86-4	Route of application	oral: gavage
	Exposure time / Frequency of treatment	90 ddaily
	Species	rat
	Method	OECD Guideline 408 (Repeated Dose 90-Day Oral
		Toxicity in Rodents)
Carbon black - Nano	Result	NOAEL=1 mg/m3
1333-86-4	Route of application	inhalation
	Exposure time / Frequency of treatment	13 w6 h/d, 5 d/w
	Species	rat
	Method	not specified
octamethylcyclotetrasiloxane	Result	LOAEL=35 ppm
556-67-2	Route of application	inhalation
	Exposure time / Frequency of treatment	6 h nose only inhalation5 days/week for 13 weeks
	Species	rat
	Method	OECD Guideline 412 (Repeated Dose Inhalation Toxicity:
		28/14-Day)
octamethylcyclotetrasiloxane	Result	NOAEL=960 mg/kg
556-67-2	Route of application	dermal
	Exposure time / Frequency of treatment	3 w5 d/w
	Species	rabbit
	Method	equivalent or similar to OECD Guideline 410 (Repeated
		Dose Dermal Toxicity: 21/28-Day Study)

Section 12. Ecological information

General ecological information:

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards., Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered., Do not empty into drains / surface water / ground water.

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Toxicity:

Calcium carbonate	Value type	LC50
471-34-1	Value	Toxicity > Water solubility
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Oncorhynchus mykiss
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Calcium carbonate	Value type	EC50
471-34-1	Value	Toxicity > Water solubility
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Calcium carbonate	Value type	EC50
471-34-1	Value	Toxicity > Water solubility

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	IA (M) : C :	TA1
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	14 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Calcium carbonate	Value type	EC50
471-34-1	Value	Toxicity > Water solubility
.,	Acute Toxicity Study	Bacteria
	Exposure time	3 h
	Species	activated sludge of a predominantly domestic sewage
	Method	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
D . 2 0010#		
Butan-2-one O,O',O"-	Value type	LC50
(vinylsilylidyne)trioxime	Value	> 560 mg/l
2224-33-1	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Brachydanio rerio (new name: Danio rerio)
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
	Value type	NOEC
	Value	50 mg/l
	Acute Toxicity Study	Fish
	Exposure time	14 d
	Species	Oryzias latipes
	Method	OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
Butan-2-one O.O'.O"-	Value type	EC50
(vinylsilylidyne)trioxime	Value	201 mg/l
2224-33-1	Acute Toxicity Study	Daphnia Daphnia
2224 33 1	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Butan-2-one O,O',O"-	Value type	EC50
(vinylsilylidyne)trioxime	Value	94 mg/l
2224-33-1	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	30 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-butanone oxime	Value type	LC50
96-29-7	Value	320 - 1,000 mg/l
70 27-1	Acute Toxicity Study	520 - 1,000 mg/1 Fish
	Exposure time	96 h
	Species	Leuciscus idus
	Method	DIN 38412-15
	Value type	NOEC
	Value	50 mg/l
	Value Acute Toxicity Study	Fish
	Value Acute Toxicity Study Exposure time	Fish 14 d
	Value Acute Toxicity Study Exposure time Species	Fish 14 d Oryzias latipes
	Value Acute Toxicity Study Exposure time Species Method	Fish 14 d
2-butanone oxime	Value Acute Toxicity Study Exposure time Species	Fish 14 d Oryzias latipes
2-butanone oxime 96-29-7	Value Acute Toxicity Study Exposure time Species Method	Fish 14 d Oryzias latipes OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
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	Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time	Fish 14 d Oryzias latipes OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study) EC50 > 500 mg/l Daphnia 48 h
	Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species	Fish 14 d Oryzias latipes OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study) EC50 > 500 mg/l Daphnia 48 h Daphnia magna
96-29-7	Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species Method	Fish 14 d Oryzias latipes OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study) EC50 > 500 mg/l Daphnia 48 h Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia)
96-29-7 2-butanone oxime	Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species Method Value type	Fish 14 d Oryzias latipes OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study) EC50 > 500 mg/l Daphnia 48 h Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia) EC50
96-29-7	Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species Method Value type Value	Fish 14 d Oryzias latipes OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study) EC50 > 500 mg/l Daphnia 48 h Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia) EC50 11.8 mg/l
96-29-7 2-butanone oxime	Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study	Fish 14 d Oryzias latipes OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study) EC50 > 500 mg/l Daphnia 48 h Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia) EC50 11.8 mg/l Algae
96-29-7 2-butanone oxime	Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species Method Value type Value Acute Toxicity Study Exposure time Species Method Value type Value	Fish 14 d Oryzias latipes OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study) EC50 > 500 mg/l Daphnia 48 h Daphnia magna EU Method C.2 (Acute Toxicity for Daphnia) EC50 11.8 mg/l

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	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	2.56 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Scenedesmus capricornutum
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-butanone oxime	Value type	EC10
96-29-7	Value	177 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	17 h
	Species	
	Method	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-Test)
Carbon black - Nano	Value type	LC50
1333-86-4	Value	Toxicity > Water solubility
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Danio rerio
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Carbon black - Nano	Value type	EC50
1333-86-4	Value	Toxicity > Water solubility
	Acute Toxicity Study	Daphnia
	Exposure time	24 h
	Species	Daphnia magna
C 1 11 1 N	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Carbon black - Nano	Value type	EC50
1333-86-4	Value Acute Toxicity Study	Toxicity > Water solubility
	Exposure time	Algae 72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
		EC10
	Value type Value	Toxicity > Water solubility
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Carbon black - Nano	Value type	EC0
1333-86-4	Value	Toxicity > Water solubility
1333 00 1	Acute Toxicity Study	Bacteria Bacteria
	Exposure time	3 h
	Species	activated sludge, domestic
	Method	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
octamethylcyclotetrasiloxane	Value type	NOEC
556-67-2	Value	0.0044 mg/l
	Acute Toxicity Study	Fish
	Exposure time	93 d
	Species	Salmo gairdneri (new name: Oncorhynchus mykiss)
	Method	EPA OPPTS 797.1600 (Fish Early Life Stage Toxicity Test)
	Value type	LC50
	Value	Toxicity > Water solubility
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Oncorhynchus mykiss
<u></u>	Method	EPA OTS 797.1400 (Fish Acute Toxicity Test)
octamethylcyclotetrasiloxane	Value type	EC50
556-67-2	Value	Toxicity > Water solubility
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test,
		Freshwater Daphnids)
octamethylcyclotetrasiloxane	Value type	EC50
556-67-2	Value	Toxicity > Water solubility
	Acute Toxicity Study	Algae
	Exposure time	96 h
	Species Method	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)

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	Value type	EC10
	Value	0.022 mg/l
	Acute Toxicity Study	Algae
	Exposure time	96 h
	Species	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)
	Method	EPA OTS 797.1050 (Algal Toxicity, Tiers I and II)
octamethylcyclotetrasiloxane	Value type	EC50
556-67-2	Value	Toxicity > Water solubility
	Acute Toxicity Study	Bacteria
	Exposure time	3 h
	Species	activated sludge
	Method	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated
		Sludge)

Persistence and degradability:

Butan-2-one O,O',O"-	Result	not readily biodegradable.	
(vinylsilylidyne)trioxime	Route of application	aerobic	
2224-33-1	Degradability	26 %	
	Method	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	
2-butanone oxime	Result	inherently biodegradable	
96-29-7	Route of application	aerobic	
	Degradability	70 %	
	Method	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA	
		Test)	
octamethylcyclotetrasiloxane	Result	not readily biodegradable.	
556-67-2	Route of application	aerobic	
	Degradability	3.7 %	
	Method	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels	
		(Headspace Test)	

Bioaccumulative potential / Mobility in soil:

Calcium carbonate	LogPow	-2.12
471-34-1	Temperature	
	Method	not specified
2-butanone oxime	Bioconcentration factor (BCF)	0.5 - 0.6
96-29-7	Exposure time	42 d
	Species	Oryzias latipes
	Temperature	25 °C
	Method	OECD Guideline 305 C (Bioaccumulation: Test for the Degree of
		Bioconcentration in Fish)
2-butanone oxime	LogPow	0.65
96-29-7	Temperature	25 °C
	Method	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
		Flask Method)
octamethylcyclotetrasiloxane	Bioconcentration factor (BCF)	12,400
556-67-2	Exposure time	28 d
	Species	Pimephales promelas
	Temperature	
	Method	EPA OTS 797.1520 (Fish Bioconcentration Test-Rainbow Trout)
octamethylcyclotetrasiloxane	LogPow	6.488
556-67-2	Temperature	25.1 °C
	Method	OECD Guideline 123 (Partition Coefficient (1-Octanol / Water), Slow- Stirring Method)

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Black silicone 300ml

Section 13. Disposal considerations

Product

Method of disposal:

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

Packaging

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Section 14. Transport information

Road transport ADR:

Not dangerous goods

Railroad transport RID:

Not dangerous goods

Inland water transport ADN:

Not dangerous goods

Marine transport IMDG:

Not dangerous goods

Air transport IATA:

Not dangerous goods

Section 15. Regulatory information

Regulatory Information:

Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555

Global inventory status:

Regulatory list	Notification
TSCA	yes
DSL	yes
KECI (KR)	yes
ENCS (JP)	yes
ISHL (JP)	yes
IECSC	yes
AIIC	yes
TCSI	yes
PICCS (PH)	yes
CH INV	yes
EINECS	yes

SDS No.: 152856
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Section 16. Other information

Disclaimer:

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